

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: June 21, 2000, 19:59:44 ; Search time 52.6 Seconds  
(without alignments)  
349.995 Million cell updates/sec

Title: US-08-702-525-13  
Perfect score: 1624  
Sequence: 1 MYVKTCTCTMGLAIIFFV.....ETINKLEPOIASAKPNAE 314  
Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 168808 seqs, 58629743 residues  
Total number of hits satisfying chosen parameters: 168808

Minimum DB seq length: 0  
Maximum DB seq length: 1000000

Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database : PIR\_63:.\*  
1: pir1.\*  
2: pir2.\*  
3: pir3.\*  
4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	1576	97.0	309	2 I49522	gene B7-2 protein - mouse
2	724.5	44.6	329	1 A48754	B7-2 antigen - hum
3	694.5	42.8	330	2 I45691	CD86 precursor - r
4	331	14.2	309	2 I49503	B-lymphocyte activ
5	223	13.7	321	2 I54766	B7-1 - rat
6	197	12.1	299	2 I46690	CD80 precursor - r
7	161.5	9.9	288	2 A45803	B-cell-restricted
8	144.5	8.9	289	2 G00031	B7 protein - red-c
9	129.5	8.0	478	2 I53960	PRR2 alpha - human
10	129.5	8.0	526	2 A37821	butyrophilin - bov
11	129.5	8.0	538	2 I68093	PRR2 delta - human
12	129.5	8.0	569	2 A46462	T cell activation
13	127	7.8	526	2 S70587	butyrophilin precu
14	116	7.1	274	2 A47639	Ox-2 membrane glyco
15	114.5	7.1	335	2 S58892	signaling lymphocy
16	114.5	7.1	1880	2 T18531	tractin - medica
17	114	7.0	487	2 S65133	butyrophilin - mou
18	113.5	7.0	391	2 T09058	butyrophilin homol
19	109.5	6.7	960	1 JN0677	receptor protein-t
20	108.5	6.7	1011	2 T13669	neuro-musculin - fr
21	107	6.6	234	2 S01320	poliovirus recepto
22	106.5	6.6	518	2 JC4024	poliovirus recepto
23	106.5	6.6	761	1 IJHUNG	neural cell adhesi
24	106.5	6.6	974	1 A49714	protein-tyrosine k
25	105.5	6.5	219	2 S52028	Ig kappa chain - m
26	105.5	6.5	978	2 S16385	CSF-1 receptor - r
27	105.5	6.5	978	2 I60321	CSF-1 receptor - b
28	105	6.5	647	2 B41288	vascular cell adhe
29	104.5	6.4	806	2 A35963	protein-tyrosine k
30	103.5	6.4	219	2 PC4203	Ig kappa chain (mo

31	103.5	6.4	240	2 JL0143	antigen BCM1 precu
32	103	6.3	490	2 H70103	hypothetical prote
33	103	6.3	999	2 I38547	novel cellular pro
34	101.5	6.2	509	2 JC5288	SHP substrate-1 pr
35	101.5	6.2	513	2 JC5289	SHP substrate-1 pr
36	101	6.2	646	2 I38049	cell surface glyco
37	100.5	6.2	416	2 A54017	colon carcinoma-as
38	100	6.2	235	2 S20000	ig light chain pre
39	100	6.2	526	2 A32164	biliary glycoprote
40	100	6.2	822	2 S19947	fibroblast growth
41	100	6.2	822	2 B49151	fibroblast growth
42	100	6.2	853	1 IJBONC	neural cell adhesi
43	100	6.2	5175	2 T20992	hypothetical prote
44	100	6.2	5198	2 T20993	hypothetical prote
45	99.5	6.1	647	2 A35648	B-cell adhesion pr

ALIGNMENTS

RESULT 1

I49522  
gene B7-2 protein - mouse  
C:Species: Mus musculus (house mouse)  
C:Date: 02-Jul-1996 #sequence\_revision 02-Jul-1996 #text\_change 23-Jul-1999  
C:Accession: I49522  
R:Freeman, G.J.; Borriello, F.; Hodes, R.J.; Reiser, H.; Gribben, J.G.; Ng, J.W.; Kim  
J. Exp. Med. 178, 2185-2192, 1993  
A:title: Murine B7-2, an alternative CTLA4 counter-receptor that costimulates T cell  
A:Reference number: I49522; MUID:94065585  
A:Accession: I49522  
A>Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-309 <RES>  
A:Cross-references: GB:I25606; NID:g432478; PIDN:AAA79770.1; PID:g432479  
C:Genetics:  
A:Gene: B7-2  
C:Superfamily: B7-2 antigen

Query Match 97.0%; Score 1576; DB 2; Length 309;  
Best Local Similarity 100.0%; Pred. No. 6e-112;  
Matches 305; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	10	CTMGLAILFVTVLLISDAVSVEQAYENGFTAYLPCPFTKRAQNISLSLVVFWQDQKLV	69
Db	5	CTMGLAILFVTVLLISDAVSVEQAYENGFTAYLPCPFTKRAQNISLSLVVFWQDQKLV	64
QY	70	LYEHLGTEKLDVSNAYLGRSTDRNNWTLRLHNVOIKDMGSYDCFIQKKPPTGSIILQ	129
Db	65	LYEHLGTEKLDVSNAYLGRSTDRNNWTLRLHNVOIKDMGSYDCFIQKKPPTGSIILQ	124
QY	130	QTLELSVIANFSEPEIKLAQNTGNSGINTCTSKOGHPKPKMYFLITNSTNEYGDM	189
Db	125	QTLELSVIANFSEPEIKLAQNTGNSGINTCTSKOGHPKPKMYFLITNSTNEYGDM	184
QY	190	QISQDNVTELSFNSLSLSPDGQVWMTVVCVLETESMKISSKPLNFTQEPSPQYWK	249
Db	185	QISQDNVTELSFNSLSLSPDGQVWMTVVCVLETESMKISSKPLNFTQEPSPQYWK	244
QY	250	EITASVTVALLLVMLLIIVCHKKPNQPSNTASKLERDSNADRETINKLEPOIASA	309
Db	245	EITASVTVALLLVMLLIIVCHKKPNQPSNTASKLERDSNADRETINKLEPOIASA	304
QY	310	KPNAE 314	
Db	305	KPNAE 309	

RESULT 2

A48754  
B7-2 antigen - human  
N:Alternate names: H70 glycoprotein; CD86 antigen; CTLA-4 counter-receptor